

ABSTRACT OF THE DISCLOSURE

Disclosed herein is a method for dewatering sewage sludge by using sludge-coal-oil co-agglomeration ("SOCA") which comprises the steps of physically, chemically or biologically conditioning sludge to impart hydrophobicity and lipophilicity to the sludge (conditioning step), supplying oil and coal to the conditioned sludge with stirring to form sludge-coal-oil agglomerates (agglomerating step), enlarging the particle diameter of sludge-coal-oil agglomerates (size enlargement step), and remaining the enlarged sludge-coal-oil agglomerates over a sieve to selectively separate them from hydrophilic materials dispersed in tailing water (screening step).

According to the method, since sludge can be rapidly, easily and effectively dewatered and purified when compared to conventional sludge treatment methods. In addition, there is no risk of involving malodor and air pollution. Furthermore, the dewatered sludge can be utilized as a high-quality fuel.